Cummins Progress Review

Agenda 3-27-08

Cummins Compliance Strategy Review

2007 Update
- Product Performance Experience
- Aftertreatment

2010 Architecture
- By platform
- Emissions Solutions
- Fuel System
- NOx Control
- DPF

2010 Program
- Master Schedule
- Progress
  - Alpha Design
  - DVP&R Plan
  - Test Cell
  - Field Test
  - Emissions Status
  - AECDs
  - OBD

Background:

-2007 products launched successfully
- *EGR, HPL
- *DPF with DOC and HC doser
- *VG Turbos (no two stage)

-Have announced that SCR will only be used for MR engines in 2010
-They have participated in the Urea Stakeholders Group
-Fleetguard is planning for urea distribution

Talking Points:

-Thank you for taking the time to give us an overview of your plans to successfully introduce clean diesel trucks.

-There are a number of technology paths that can be used to meet 2010 and we would like hear which how you selected your paths and how you have progressed

-2010 engines are vitally important:

*complete the order-of-magnitude reductions in PM and NOx

*2.6 million tons of NOx reduced

*110,000 tons of PM

*8,300 premature deaths prevented

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*1.5 million lost work days

*7,100 hospital admissions/year

-On road diesel engines lay the groundwork for reductions in other applications

-Clean diesel engines will be a key technology for future GHG reductions

-2007 fuel and engine technologies have been successfully launched

*ULSD has become the norm

*New engines have been 'transparent' to users (fuel economy, maintenance)

-2010 will build on this success

*depends on similar end-user transparency and

* one path depends on readily available urea (DEF)

-DEF infrastructure

Attendees:

Steve Charlton -- Executive Engineer HD Engines
Jeff Weikert -- Executive Engineer MidRange Engines
Robert Jorgensen -- Executive Director Product Environmental Management
Sean Milloy – Dodge Product Manager?
Tina Vujovich -- VP Marketing and Environmental Policy

CISD: Cle and Greg Orehowsky

2010 Product Line:

ISX, 11.9 l, 15 l, 16 l, 305-600 hp, 2000+ Bar common rail, HPL EGR w/Air-to-EGR cooling, DOC/DPF, and VGT
ISL, 9 l, 310-350 hp HPL EGR, SCR, DOC/DPF, and VGT
ISC, 8.3 l, 240-315 hp HPL EGR, SCR, DOC/DPF, and VGT
ISB, 6.7 l, 185-275 hp, HPL EGR, SCR, DOC/DPF, and VGT